

- Fig. 7.* Imperfect head of *Nerinides (?) lamellata*, with the short proboscis extended. Enlarged.  
*Fig. 8.* Ventral stiff bristles of the same. × Zeiss oc. 4, obj. D.  
*Fig. 9.* Anterior end of *Kinbergella plumosa*. Enlarged.  
*Fig. 10.* Ventral hook from the 16th foot of the same species. × Zeiss oc. 4, obj. D.

## PLATE VI.

- Fig. 1.* Dorsal bristles of the 10th foot of *Nerinides lamellata*. × Zeiss oc. 4, obj. D.  
*Fig. 2.* Winged bristle of the dorsal division of the same foot. × similarly.  
*Fig. 3.* Ventral bristles of the 10th foot. × similarly.  
*Fig. 4.* 25th foot of the same species. × similarly.  
*Fig. 5.* 50th foot of the foregoing. × similarly.  
*Figs. 6 & 7.* Different views of the 4th foot of *Kinbergella plumosa*. × 48 diam.  
*Fig. 8.* 10th foot of the foregoing form. × similarly.  
*Fig. 9.* 10th foot of *Scolecopsis* l. × about 34 diam.

XXI.—*Descriptions of Seventeen new Species and Varieties of Land and Freshwater Shells from East and West Africa and the Transvaal.* By H. B. PRESTON, F.Z.S.

## [Plate VII.]

HAVING recently had through my hands a number of land and freshwater shells from the German Cameroons, and finding among them a number of forms which seem to have hitherto escaped notice, I venture to describe them in the present paper; at the same time I take the opportunity of describing two species of *Fischeria* from Senegal, collected in that region by Colonel M. Messenger, and two species of *Achatina* from E. Africa and the Transvaal respectively, as also a variety of *Achatina variegata*, Lk., from W. Africa, which, being constant and well-marked in form, I have thought worthy of a varietal name.

*Gibbus (Edentulina) confusa*, sp. n. (Fig. 1.)

Shell ovate-elongate, rather laterally compressed, thin, white, somewhat shining, semitransparent, rimate; whorls  $5\frac{1}{2}$ , sculptured with very fine oblique transverse lines, very minutely but closely punctate throughout, the latter portion of the last whorl somewhat ascending; sutures linear; columella descending obliquely above, excavated below, outwardly

triangularly expanded, the expansion bearing a depression in the middle; parietal wall somewhat excavated in the region of the columella: peristome slightly thickened, reflexed; aperture subquadrate.

Alt. 22, diam. maj. 12 mm.

Aperture: alt. 9, diam. 5.5 mm.

*Hab.* (type specimen). Bitze, near the River Ja, Cameroons; several broken specimens also from Akok, 30-35 miles from the coast at Kribi.

Distinguished from *G. liberiana*, Lea \*, from Liberia, by its smaller size, thinner texture, and much finer transverse sculpture; moreover, the exceedingly fine punctate sculpture easily separates it from *G. liberiana*.

*Helicarion bitzeensis*, sp. n. (Figs. 2, 3.)

Shell corneous, semitransparent, dark yellowish green; spire much depressed; whorls 3, here and there showing traces of slight malleation, puckered into irregular arcuate riblets or creases, on and between which appear fine lines of growth, the last whorl subcarinate, somewhat widely expanded towards the aperture; sutures well impressed; aperture subovate, dilated above, rather laterally constricted.

Alt. 11, diam. maj. 25.5 mm.

Aperture: alt. 12, diam. 14.5 mm.

*Hab.* Bitze, near the River Ja, Cameroons (type); also a single specimen taken at Akok, 30-35 miles from the coast at Kribi.

*Helicarion umbrosolabiata*, sp. n. (Figs. 4, 5.)

Shell corneous, thin, light olive-green, somewhat inflated; whorls 3, marked with growth-lines and occasionally creased into broad riblets, the last whorl scored with very fine irregular spiral scratches; sutures impressed; peristome folded inwards so as to form a narrow thickening, dark brownish green; aperture obliquely ovate.

Alt. 15, diam. maj. 25.5 mm.

Aperture: alt. 13, diam. 14.5 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

*Thapsia rosenbergi*, sp. n. (Fig. 6.)

Shell depressed, perforate, discoidal, thin, polished, horny, light reddish brown; whorls  $5\frac{1}{4}$ , sculptured with very fine, wavy, spiral striae and transverse lines of growth; base lighter

\* Philad. Trans. vii. p. 457, pl. ii.

in colour than the rest of the shell ; sutures impressed, margined, whitish ; umbilicus narrow, deep, partly concealed by the reflexed columella ; peristome thin, acute ; aperture oblique, broadly lunate.

Alt. 6·5, diam. maj. 13·5 mm.

Aperture : alt. 5, diam. 5·5 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

Type in British Museum.

A very variable species ; one specimen is of a much darker colour than the others submitted to me, and the margin of the suture, instead of being whitish, is of even a deeper shade of reddish brown than the rest of the shell ; another is somewhat larger and flatter in proportion than the type, but I am unable to separate them specifically.

*Achatina dacostana*, sp. n. (Fig. 7.)

Shell ovate, pale brownish yellow, painted with very indistinct greyish flame-markings, especially noticeable on the fourth and fifth whorls, and bearing traces of having been covered with a very thin greenish-brown periostracum ; whorls  $6\frac{1}{2}$ , flattish, the upper finely granular, the last coarsely granular above the periphery, smooth and shining below ; sutures impressed, crenulate ; aperture ovate ; peristome acute ; columella descending obliquely and spreading into a thin callus which joins the upper margin of the peristome.

Alt. 75, diam. maj. 37·5 mm.

Aperture : alt. 38, diam. 22 mm.

*Hab.* East Africa.

*Achatina subcylindrica*, sp. n. (Fig. 8.)

Shell thin, subcylindrical, pale greenish yellow ; whorls  $7\frac{1}{2}$ , regularly increasing, slightly convex, finely granular except on the lower half of the last whorl, which is smooth ; apex obtuse, somewhat flattened ; sutures well impressed, lightly crenulate ; columella descending in a curve ; peristome thin, acute ; aperture inversely auriform.

Alt. 38·5, diam. maj. 13·5 mm.

Aperture : alt. 13, diam. 7 mm.

*Hab.* Natal.

Allied to *Achatina transvaalensis*, Smith\*, but differing chiefly in its more cylindrical form, flatter whorls, and rather coarser sculpture.

\* Journ. Conch. vol. i. pp. 351-352.

*Achatina variegata*, Lk., var. *gracilis*, nov.

Shell less swollen and proportionately much narrower than is the case with the typical *A. variegata*; the whorls are also rather more convex and the painting less regular.

Alt. (about) 120, diam. maj. (about) 58 mm.

*Hab.* West Africa.

*Callistoplepa tiara*, sp. n. (Fig. 9.)

Shell oblong-ovate, thin, corneous, pale chestnut, ornamented on the upper whorls with zigzag transverse streaks of purplish brown which become thickened and deepened in colour just above the sutures, so as to appear as a supersutural row of squarish dark purple blotches, and which are continued on the body-whorl as a peripheral interrupted band; the last two whorls are also painted with irregular cream-coloured patches; whorls 6, sculptured with fine, wavy, spiral striæ crossed by irregular transverse ridges, giving to the shell a finely granular appearance; the sculpture, though continued towards the base of the shell, becomes obsolete below the periphery; sutures impressed, subcrenulate; columella straight, dark purple; peristome simple, acute; aperture elongately inversely auriform.

Alt. 49, diam. maj. 25·25 mm.

Aperture: alt. 30·75, diam. 13·5 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

*Pseudachatina nodosa*, sp. n. (Fig. 10.)

Shell ovate-conic, moderately thin, painted above with broad brownish-purple transverse flame-markings, between which the pale flesh-colour of the shell is visible, covered on the lower whorls with a thin, scaly, yellowish-brown periostracum; whorls  $7\frac{1}{2}$ , the first three granulated with fine spiral striæ crossed by irregular transverse lines, the remainder irregularly coarsely nodulous, the last bearing two obsolete keels about 9 mm. apart, the lower one situated at the periphery; sutures crenulate, somewhat lightly impressed; columella obliquely curved, a thick callus, the outer margin of which is tinged with purple, joining it with the lip above; peristome expanded, scarcely reflexed, livid purple; aperture obliquely inversely auriform; interior of shell bluish white, a broad purple band appearing on the upper portion of the parietal wall.

Alt. 61, diam. maj. 29 mm.

Aperture: alt. 26, diam. 13 mm.

*Hab.* (of type). Bitze, near the River Ja, Cameroons; specimens were also collected at Akok, 30–35 miles from the coast at Kribi.

In some respects resembling *P. martensi*, d'Ailly \*; the present shell is, however, of a lighter texture, there is practically no basal zone of deeper coloration, and the peristome is always livid purple in colour, whereas M. d'Ailly makes a great point of the constant whiteness of the peristome in his species.

*Pseudachatina nodosa*, Preston, var. *emineus*, nov.  
(Fig. 11.)

Much more elongate than the typical form, the keels on the last whorl are even more obsolete, and the columella is less curved.

Alt. 89, diam. maj. 37.5 mm.

Aperture: alt. 33, diam. 17 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

*Pseudotrochus batesi*, sp. n. (Fig. 12.)

Shell oblong-turrite, thin, pale flesh-coloured, transversely banded, spotted, and tessellated with chestnut-brown and creamy white, covered with a very thin pale yellowish-brown periostracum; apex flattened; whorls  $6\frac{1}{2}$ , the embryonic whorls submamillary and presenting under a lens a weathered appearance, the later whorls regularly furrowed with closely set, broad, very flat, spiral ridges, and sculptured with very fine, wavy, spiral striæ, crossed by irregular lines of growth, somewhat angled above the periphery; periphery strongly but bluntly carinate; sutures impressed, lightly crenulate, narrowly margined, whitish; base of shell convexly elongate; columella slightly excavated above, twisted at base, reddish brown and diffused into a callus, which joins the lip above and continues as a parietal callus throughout the interior of the shell; peristome angled, sharply acute; aperture nearly quadrate.

Alt. 51.5, diam. maj. 30 mm.

Aperture: alt. 21.5, diam. 13.5 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

Type in British Museum.

A very remarkable shell, whose nearest ally appears to be

\* 'Bihang till Kongl. Svenska Vetenskaps-Akademiens Handlingar,' 22, Afd. 4, no. 2, 1896, pp. 95–98.

*P. lechatelieri*, Dautz.\*, from Dahomey; from this it is distinguished by its more acute spire, submamillary apex, broader base, blunter peripheral carina, coloured columella and parietal callus, flatly furrowed sculpture, and general colouring, which in *P. lechatelieri* is generally darker, especially on the base, while the chestnut bands on the spire are more pronounced, numerous, and generally confined to the lower portion of the whorls, which is not the case with *P. batesi*.

*Pseudotrochus efulenensis*, sp. n. (Fig. 13.)

Shell oblong-turrite, flesh-coloured, irregularly painted with blotches and streaks of dark brownish purple and cream-colour, base of shell painted with a broad band of blackish purple just below the periphery, which gives place to a zone of creamy flesh-colour between it and the columella; whorls 7, the embryonic whorls very flat, constricted and quite smooth, the later whorls gradually increasing, sculptured with fine, slightly wavy, spiral striæ and transverse growth-lines, the last whorl carinate at the periphery; sutures lightly impressed, subcrenulate; columella greyish brown, descending somewhat obliquely and extending into a thin, minutely granular callus which reaches the lip above; peristome slightly expanded, brownish flesh-colour; aperture subquadrate.

Alt. 63, diam. maj. 29 mm.

Aperture: alt. 28, diam. 14.5 mm.

*Hab.* Near Efulen, S. Cameroons.

Type in British Museum.

*Pseudoglessula camerunensis*, sp. n. (Fig. 14.)

Shell subulately fusiform, glossy, light brown, mottled and streaked with blotches and bands of a dark purple colour; apex slightly mammillate; whorls  $8\frac{1}{2}$ , the first two and a half spirally striate and lightly, transversely costate, presenting a punctate appearance, the remainder sculptured with fine, closely set, transverse riblets, the last whorl bearing a thread-like carina at the periphery; sutures impressed; columella whitish, excavated above, curved below, somewhat obliquely truncate, a very light callus joining it with the lip above; peristome simple, acute; aperture inversely auriform.

Alt. 30.5, diam. maj. 12 mm.

Aperture: alt. 11, diam. 5 mm.

\* Journ. de Conchyl. xl. 1892, p. 297; xli. 1893, p. 33, pl. i.

*Hab.* (of type). Akok, 30–35 miles from the coast at Kribi, Cameroons; specimens also occurred at Bitze, near the River Ja.

Allied to *P. clavata*, Gray, from which it differs by its more cylindrical form and the very fine sculpture of the embryonic whorls, which in *P. clavata* are much more coarsely costate; the last whorl and the aperture in the present species are also much longer.

*Homorus foveolatus*, sp. n. (Fig. 15.)

Shell narrowly subulate, dark brown, smooth, polished, shining; apex mammillate; whorls  $10\frac{1}{2}$ , flattish, irregularly marked with fine oblique growth-lines, the last whorl somewhat carinate at the periphery; sutures well impressed; columella descending in a curve, abruptly truncate, extending into a callus which joins the lip above; peristome simple, acute; aperture ovate.

Alt. 16·25, diam. maj. 3·5 mm.

Aperture: alt. 2, diam. 1 mm.

*Hab.* Akok, 30–35 miles from the coast at Kribi, Cameroons.

*Subulina jaensis*, sp. n. (Fig. 16.)

Shell bluntly subulate, thin, light yellowish flesh-colour, submammillate at the apex; whorls  $8\frac{1}{2}$ , rather flat, the first two and a half smooth except for a minute infrasutural plication, the last six whorls closely transversely striate; sutures subcrenulate; columella curved and twisted; peristome acute; aperture elongately ovate.

Alt. 18·75, diam. maj. 4·25 mm.

Aperture: alt. 3·75, diam. 1·5 mm.

*Hab.* Bitze, near the River Ja, Cameroons.

*Fischeria messengeri*, sp. n. (Fig. 17.)

Shell thin, elongately oblong, marked faintly with concentric lines of growth, covered with a smooth pale olive-green periostracum; teeth small; posterior side very obtusely rostrate; anterior side somewhat acutely rounded; dorsal margins sloping, especially anteriorly; ventral margin rounded centrally, slightly excavated posteriorly.

Long. 15, lat. 23·5 mm.

*Hab.* Senegal River.

*Fischeria approximans*, sp. n. (Fig. 18.)

Shell thin, elongately ovate, dark olive-green painted with



rays of a darker colour and covered with a smooth periostracum; teeth small, the cardinal tooth on right valve bifid; posterior side obtusely rounded above, angled below; anterior side sharply rounded; dorsal margins very gradually sloping; ventral margin angled, somewhat produced centrally.

Long. 13, lat. 20.5 mm.

*Hab.* Podor, Senegal River.

Allied to *F. levigata*, von Mts., but differing from that species by its angular and produced ventral margin, more sharply rounded anterior side, and more obtuse posterior side; moreover, the bifid cardinal tooth in the right valve immediately distinguishes it from *F. levigata*.

#### EXPLANATION OF PLATE VII.

*Fig.* 1. *Gibbus (Edentulina) confusa*, sp. n.

*Figs.* 2, 3. *Helicarion bitzeensis*, sp. n.

*Figs.* 4, 5. — *umbrosolabiata*, sp. n.

*Fig.* 6. *Thapsia rosenbergi*, sp. n.

*Fig.* 7. *Achatina dacostana*, sp. n.

*Fig.* 8. — *subcylindrica*, sp. n.

*Fig.* 9. *Callistoptepa tiara*, sp. n.

*Fig.* 10. *Pseudachatina nodosa*, sp. n.

*Fig.* 11. — *nodosa*, var. *eminens*, nov.

*Fig.* 12. *Pseudotrochus batesi*, sp. n.

*Fig.* 13. — *efulenensis*, sp. n.

*Fig.* 14. *Pseudoglessula camerunensis*, sp. n.

*Fig.* 15. *Homorus foveolatus*, sp. n.

*Fig.* 16. *Subulina jaensis*, sp. n.

*Fig.* 17. *Fischeria messengeri*, sp. n.

*Fig.* 18. — *approximans*, sp. n.

XXII.—*Rhynchotal Notes*.—XLVI. By W. L. DISTANT.

#### HOMOPTERA.

#### Fam. Cercopidæ.

#### *Neotropical Genera and Species.*

The Neotropical Cercopidæ are well represented in the British Museum. In addition to those described by Walker it possesses the splendid Godman Collection from Central America worked out and described by Fowler. It has also during recent years acquired a large number of species from Ecuador and Bolivia, many of which are here described. The Fry Collection, bequeathed to the British Museum by